



Missouri Schools Going Solar

Missouri Energy Center fact sheet

5/2004

Missouri Schools Going Solar (MSGS) exists to educate students, teachers and communities about the importance of electricity as an energy form, the value of renewable solar energy in meeting current and future energy needs, and solar energy technologies. This project serves K-12 schools that have an interest in solar electric energy and the initiative to create a partnership with the Missouri Department of Natural Resources' Energy Center, AmerenUE and the local community to install a solar array. The solar arrays offer a great opportunity for students, parents, teachers, governments, utilities and whole communities to increase their awareness and familiarity with solar electric energy technologies that are successfully in use throughout the world.



Benefits

Schools chosen to participate in MSGS will benefit from a two-part program for energy education:

Photovoltaic Hardware:

Part one includes the hardware and technical assistance to install a 1-kW interconnected photovoltaic array on school grounds. This array will generate a small amount of electricity but has the potential to generate lots of community and school interest, enthusiasm and understanding about clean, renewable solar electric energy. The standard MSGS package system will include a 1-kW array. The estimated cost of the hardware with installation is \$10,000 and will be provided by the Energy Center. Awarded schools may choose to "upgrade" the system to a larger array but will be responsible for any costs above a standard MSGS package.

Missouri Schools Going Solar will provide a free training session on proper operation and maintenance of the photovoltaic hardware. Maintenance will be minimal but this mandatory training for facility and maintenance management will ensure that the school understands how to maintain its new equipment.



Energy Education:

Part two is an energy education program providing grade-appropriate interdisciplinary curricular materials and teacher training that is consistent with Missouri Department of Elementary and Secondary Education standards. The Gateway Center for Resource Efficiency, a division of the Missouri Botanical Garden, will implement this educational component of MSGS. The Gateway Center is a leader in energy education and will work to meet a school's individual needs. Ideally suited for grades 4-7, this educational component will target the school's existing math or science curriculum to provide additional supplemental material and instruction about energy forms and sources with special emphasis on photovoltaic technology. Coupled with the solar array installation, this has been an effective method for energy education in states that have offered this type of program.



Eligibility

Any Missouri K-12 school that is a Missouri AmerenUE electric service customer may apply. Both public and private schools are eligible.

Cost Sharing

Awarded schools must contribute a minimum match of \$2,500 in cash. Total value of each project is approximately \$20,000, including the school match.

Schedule

The 20 installations will occur over three grant cycles. The application deadlines are listed below. More details and applications are available online at www.dnr.mo.gov/energy or by contacting the department's St. Louis Urban Outreach Office at (314) 340-5900.

<u>Grant cycle</u>	<u>Application Deadline</u>	<u>Implementation</u>
Cycle 1	April 16, 2004	Fall 2004
Cycle 2	October 29, 2004	Fall 2005
Cycle 3	October 31, 2005	Fall 2006

For More Information

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1-800-361-4827 or (573) 751-3443
www.dnr.mo.gov/energy



Missouri
Department of
Natural Resources



Missouri
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Garden

Missouri Schools Going Solar is a project of the Missouri Department of Natural Resources, with funding from AmerenUE and education programming from the Gateway Center for Resource Efficiency, a division of the Missouri Botanical Garden